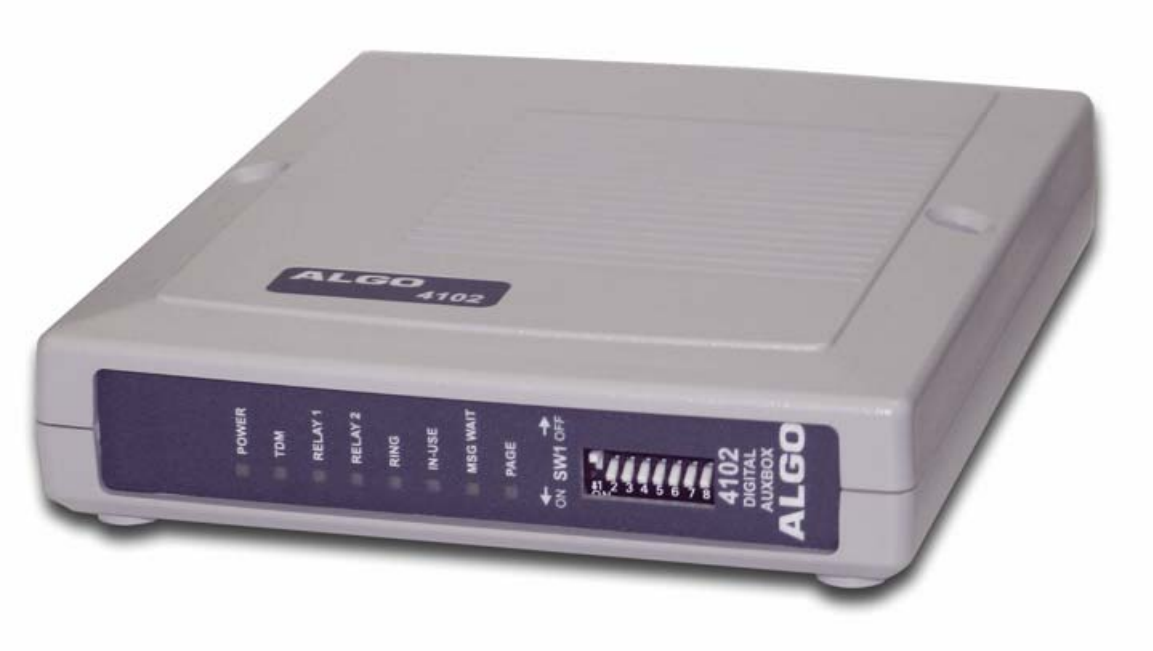
4102 Digital AuxBox

Call Recording For Nortel™ TDM Digital Telephones



Hardware & Installation Guide

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Table of Contents

ABOUT THE 4102 DIGITAL AUXBOX 3

INSTALLATION 4

SOFTWARE 5

CONNECTION DIAGRAM 5

HARDWARE DESCRIPTION 6

SWITCH SETTINGS 8

WARRANTY AND REPAIR 9

SPECIFICATIONS 10

CONTACT INFORMATION 11

OPTIONAL ENHANCEMENT PRODUCTS 12

About the 4102 Digital AuxBox

Features

- Calls can be recorded automatically or by hot key function.
- Software displays call file, duration of call, time and date, caller ID, and user-added comments.
- Detects message waiting, ringing, in-use, and more.

The 4102 Digital AuxBox includes:

- 4102 Digital AuxBox
- User Guide
- CCR Software CD
- Telephone line cord
- USB cable
- Relay Cord
- Power Supply

The 4102 Digital AuxBox monitors the activity of your digital Norstar, BCM, Meridian 1, or Succession telephone including the voice channel. This information is sent to a PC using a USB (Universal Serial Bus) connection. The AuxBox Recorder Software allows you to record, playback, and email telephone conversations (with call display information) using the hard drive of your PC or server.

The 4102 Digital AuxBox also provides an analog output for recording with a separate audio recorder or PC sound card and provides relay outputs to indicate ringing, in-use, message waiting, and other events. These relay outputs may be used for audible and visual alerting or activation of analog recording equipment.

Please Note:
The legality of recording conversation varies by location. It is the responsibility of the user to ensure compliance with local regulations concerning the recording of telephone conversations.

The 4102 Digital AuxBox does not provide tones to indicate that a conversation is being recorded.

Installation

Connecting the 4102 Digital AuxBox to your digital telephone

1. Disconnect your telephone line cord from the wall jack and connect to either one of the RJ12 telephone jacks on the 4102 Digital AuxBox. Using the supplied telephone line cord, connect the second RJ12 telephone jack on the AuxBox to your telephone wall jack.

2. Ensure that your digital telephone is operational. This may take a few minutes depending on your telephone system.

- OR -

3. The 4102 may be installed in a bridging configuration using either RJ12 jack. Maximum recommended cord length is 15 feet.

Connecting to your PC USB Port

1. Connect the USB cable to your PC and to the 4102 Digital AuxBox. Connect the power supply to the 4102 Digital AuxBox.

   The first time you connect 4102 Digital AuxBox, Windows should advise *"New hardware Found"* and proceed to load the necessary drivers. Windows should install up to 3 sets of drivers. ***USB Composite Device, USB Audio Device, and Human Interface Device (HID).***

2. For each, select the recommended driver by clicking the **Next** and **Finish** buttons as appropriate. You may be prompted for your Windows CD during this process. Note that on many computers these files are also stored in **C:\WINDOWS\OPTIONS\CABS.** Ask your System Administrator if you have any difficulties.

The LEDs (light emitting diodes) on the front panel indicate whether the hardware installation was successful. The Power/USB LED will be winking to indicate communication with the PC USB port. The Norstar / BCM / Meridian 1 LED will be winking twice for Norstar / BCM, once for Meridian 1 or Succession. Allow approximately 8 seconds for this to begin.

Lift the telephone handset (or go off-hook with the speakerphone or headset) to turn on the "Off-Hook" LED on the front panel of the 4102 Digital AuxBox. This indicates that the unit is working properly.

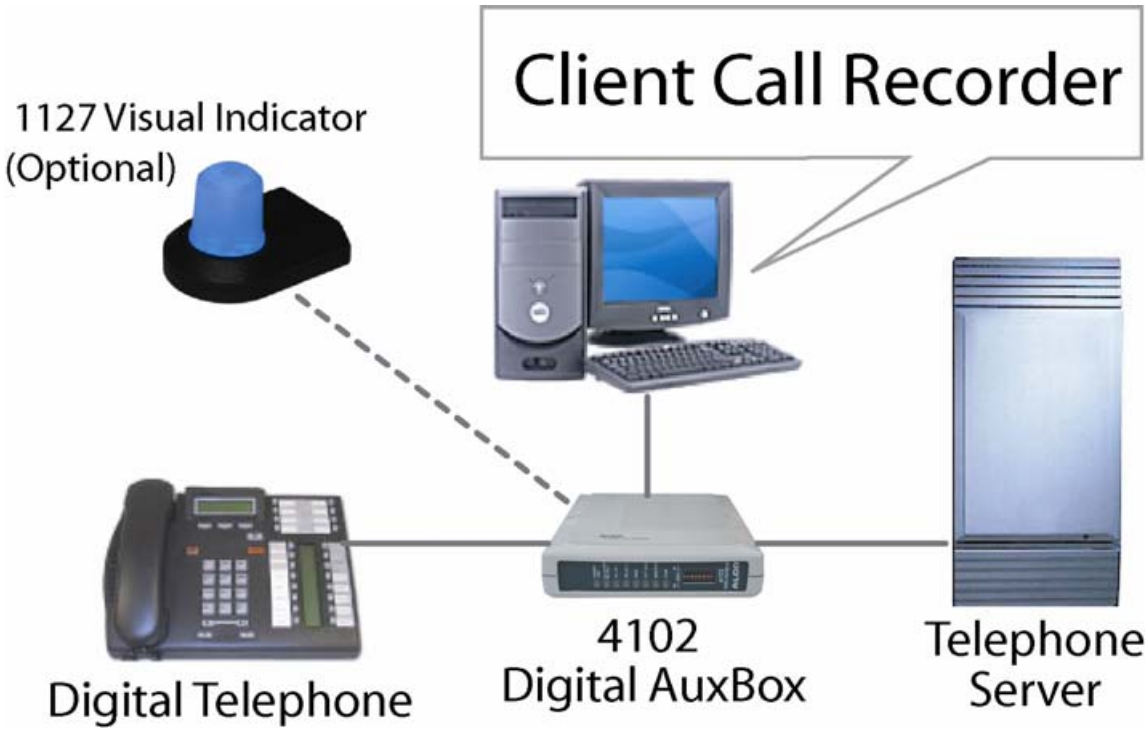
Please refer to the Software User Guide for software installation instructions.

Software

Client Call Recorder
The Client Call Recorder (CCR) software is included with the 4102 Digital AuxBox. This software records and stores calls from the 4102. It provides many features including missed call information capturing, editable comments field, and WMA encoded audio capture. Please refer to the Client Call Recorder User Guide on the included CCR CD for a full description of the software.

Enterprise Call Recorder Software
The 4102 Digital AuxBox is compatible with Algo's Enterprise Call Recorder (ECR) software. The ECR is a call recording solution for environments requiring centralized multi-user call recording. It expands on the feature set of the Client Call Recorder and is ideally suited for a networked environment. For more information on the ECR check Algo's website (www.algosolutions.com) or contact us (see contact information at end of this document).

Connection Diagram



Hardware Description

Front Panel Lights

Power
Winking indicates USB connection;
On solid indicates device is powered but no USB activity has been detected

TDM
Winking once indicates connection to M1 / Succession;
Winking twice indicates connection to BCM / Norstar

Relay 1
Relay 1 is activated when light is on

Relay 2
Relay 2 is activated when light is on

Ring
Ring has been detected on telephone when light is on

In-Use
Phone is in-use (on handset, headset, or hands-free) when light is on

Msg Wait
Message Waiting indication has been detected on the telephone when light is on

Page
Voice call or page is in progress when light is on

SW1
See page 8 for explanation of dipswitch functions

Back Panel

USB
Connect to USB port of PC; Provides connectivity to Algo Recording Software

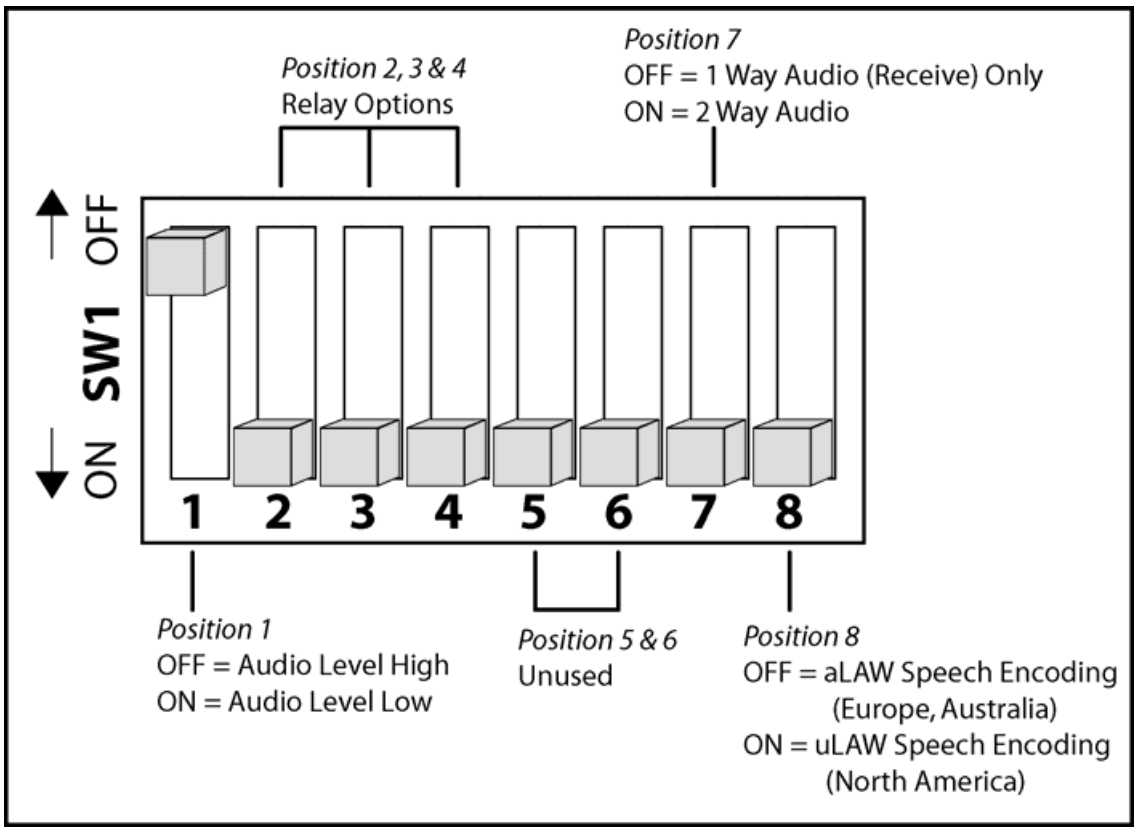
Power (24Vdc 0.2A)
Connect power adapter supplied with the unit

Relay 1 / Relay 2
2.5mm mono jack supplying Dry Contact closure outputs

Audio
3.5 mono jack providing analog audio output

RJ12 Jacks
Connect digital telephone in series using line in/line out configuration **OR** connect either jack to wire pair carrying digital signal

Switch Settings



Relay Options

Two relays provide dry-contact outputs to interface with external devices, such as those listed on the back cover.

The dry-contact functionality may be configured using SW2-4, as illustrated in the diagram to the right.

Switches	Relay 1	Relay 2
2 3 4	Ring	Off-Hook
2 3 4	Ring	Page
2 3 4	Ring	Msg Waiting
2 3 4	Off-Hook	Page
2 3 4	Off-Hook	Msg Waiting
2 3 4	Page	Msg Waiting
2 3 4	Off-Hook	Off-Hook
2 3 4	Used During Configuration	

Warranty and Repair

The 4102 Digital AuxBox is warranted to be free of defects in material and workmanship for a period of 18 months from the date of manufacture. A label on the bottom of the 4102 Digital AuxBox identifies the manufacturing code in the year and week format (0420YYXXXX for the twentieth week of 2004).

If you need to return the product for repair, please contact Algo Communication Products Ltd for a Return Merchandise Authorization (RMA) number and instructions prior to shipment. All products returned for repair should be shipped freight prepaid with the RMA# clearly visible on the package. Products will be returned freight collect for out-of-warranty repairs or returned prepaid for warranty repairs in Canada or the USA.

In North America, ship product for repair with RMA# to:

Algo Communication Products Ltd.
Repair Centre
4500 Beedie Street
Burnaby, BC
Canada, V5J 5L2

Outside of North America, please contact Algo for the name of the nearest repair centre.

Specifications

Telephone Connection

Compatibility	M7100, M7208, M7310, M7324 T7100, T7208, T7316, T7316E, T7406 M2006, M2008, M2216, M2616 M3901, M3902, M3903, M3904, M3905 M2250 (contact Algo for M2250 wiring details)
Loop Limit	3500 feet (1065m) M1 / Succession 2600 feet (800m) Norstar / BCM
Connection	Line in / Line out in series or bridge tap < 15 feet (4.6m)

PC Requirements (for recording software)

Hardware	USB Port and compatible operating system; See software user guide for important details

Power Supply

North America	117V 60Hz to 24 Vdc 200mA adapter
UK	230V 50Hz to 24 Vdc 200mA adapter
Europe/Australia	Contact Algo or your distributor

Analog Audio Output

Connection	3.5mm audio jack
Level	0 dBm or -12 dBm output 600 Ohms

Relay Outputs (2 provided)

Connection	2.5mm audio jack
Voltage	Max 30V SELV
Current	Max 50mA non-inductive
Function	Ring, In-Use (Off Hook), Message Waiting, or Page (depending on SW1 Settings)

Cables Included

USB	6 feet (1.8m) USB Cable A-B
Relay	6 feet (1.8m) 2.5mm plug to 2.5mm plug
Telephone	7 feet (2.1m) 6-conductor telephone line cord

Contact Information

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Optional Enhancement Products for the 4102 Digital AuxBox

1825P Duet Plus

Multi-application loud ringer and paging amplifier for business telephone systems in an office or industrial environment.

1185 Horn Speaker

Weatherproof, 8 Ohm horn speaker can be used to significantly increase the volume of the 1825P Duet Plus Ringer above.

1127P Visual Alerter

A desktop or mountable visual indicator for message waiting, in-use or ring. Designed to be visible from all angles. Available in red, green, or blue.

1126P Strobe Light

A highly visible indicator available with clear, red, amber, or blue lens.

Enterprise Call Recorder Shelf System

The 4210 Shelf and 4102R Digital Line Card are designed for equipment or server room installations of the multi-user Enterprise Call Recorder software. Ideal for small call centers, the ECR Shelf System provides a robust and easy to integrate call recording solution for up to 32 users.

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